## In the Claims:

Please amend the Claims as follows:

- 1. (Original) An acoustic signal monitoring system, comprising:
- a time series analyzer configured to determine and provide a continuous feedback about an on/off state of a microphone to a user, said analyzer also enabling gain adjustment to prevent signal clipping or amplifier overloading; and
- a parameter adjustment element operating to calculate frequency domain parameters, said frequency domain parameters providing information about placement of the microphone with respect to an audio source, where said information enables the user to take appropriate actions to enhance operation of an audio system.
- 2. (Currently amended) A method for performing a time series analysis of an acoustic signal comprising:

determining information about an on/off state of a microphone comprising the steps of:

comparing said <u>acoustic</u> signal to a threshold value to determine the on/off state of said microphone; and

continuously providing feedback based on said information.

3. (Previously Presented) A method of adjusting the quality of the acoustic signal comprising:

performing frequency domain transform of said acoustic signal; computing a signal to noise ratio of said acoustic signal; and continuously providing a feedback based on said signal to noise ratio.

4. (Previously Presented) The method of claim 2, further comprising: performing detection of signal clipping.





- 5. (Previously Presented) The method of claim 3, further comprising: using said computed signal to noise ratio to calculate gain adjustment for the amplifier.
- 6. (Original) The method of claim 5, where said signal to noise ratio provides information about placement of a microphone with respect to an audio source.
- 7. (Previously Presented) An apparatus comprising a computer-readable storage medium having executable instructions that enable the computer to:

perform frequency domain transform of an acoustic signal; compute signal to noise ratio of said acoustic signal; and continuously provide a feedback based on said signal to noise ratio.



8. (Previously Presented) The acoustic signal monitoring system of claim 1, further comprising:

a frequency transform unit configured to transform incoming acoustic signal into frequency domain for calculation in said parameter adjustment element.

- (Previously Presented) The method of claim 5, further comprising:
  performing puff detection using said calculated said signal to noise ratio; and
  advising the user to adjust placement of the microphone that generates said
  signal.
- 10. (Previously Presented) The method of claim 2 wherein said step of comparing further comprising:

calculating the RMS value of said signal; and comparing said RMS value to a threshold value to determine the on/off state of said microphone.

11. (Previously Presented) The apparatus of claim 7 wherein said a computer readable storage medium further having executable instructions that enable the computer to:

use said computed signal to noise ratio to calculate gain adjustment for the amplifier.

- 12. (Previously Presented) The apparatus of claim 11 wherein said signal to noise ratio provides information about placement of a microphone with respect to an audio source.
- 13. (Previously Presented) The apparatus of claim 11 wherein said a computer readable storage medium further having executable instructions that enable the computer to:

perform puff detection using said calculated said signal to noise ratio; and advise the user to adjust placement of the microphone that generates said signal.

14. (Currently amended) An apparatus comprising a computer readable storage medium having executable instructions that enable the computer to:

determine information about an on/off state of a microphone by comparing said an acoustic signal to a threshold value to determine the on/off state of said microphone; and

continuously provide feedback based on said information.

15. (Previously Presented) The apparatus of claim 14 wherein said a computer readable storage medium further having executable instructions that enable the computer to:

performing detection of signal clipping.

16. (Previously Presented) The apparatus of claim 14 wherein said computer readable storage medium having executable instructions that enable the computer to determine information about an on/off state of a microphone by comparing said signal to a threshold value to determine the on/off state of said microphone further comprises executable instructions that enable the computer to:

calculate the RMS value of said signal; and



compare said RMS value to a threshold value to determine the on/off state of said microphone.

- 17. (Previously Presented) The acoustic signal monitoring system of claim 1 wherein said time series analyzer configured to determine said on/off state by comparing signal from said microphone to a threshold value.
- 3
- 18. (Currently Amended) The acoustic signal monitoring system of claim 1 wherein one of said frequency domain parameters is <u>a frequency domain</u> signal to noise ratio.